

REMARKS

The last Office Action of February 17, 2009 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-15 are pending in the application. Claims 2, 4-12 have been amended. Claims 1, 3, 14 have been canceled. Claim 16 has been added. No amendment to the specification has been made. No fee is due.

CLAIM OBJECTIONS

Applicant has canceled claim 14 and has amended claim 12 to provide antecedent basis for the "cooling channel". These changes are self-explanatory and cosmetic in nature and should not be considered as a narrowing amendment to trigger prosecution history estoppel.

Withdrawal of the claim objection is thus respectfully requested.

CLAIM REJECTIONS - 35 U.S.C. §103(a)

Claims 1-5, 7-9, 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over German Patent Document DE 10122425 A1 to Hannes in view of Japanese Patent Document JP 11255118 A to Muramoto.

Claims 6, 10-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hannes and Muramoto in view of U.S. Pat. No. 1238292 to Hellmund.

Claims 13-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hannes, Muramoto and Hellmund, and further in view of German Patent Document DE 4427760 to Schneider.

The rejection under 35 U.S.C. 103(a) is respectfully traversed in view of the amendments to sole independent claim 4, as now on file, and the following remarks.

Applicant has canceled claim 1 in favor of claim 4 which has been rewritten in independent form and sets forth the provision of a barrier provided in the rotor for protecting against ingress of foreign matter via the air inlet into the wheel set shaft when the fan draws in air. Applicant has introduced the term --barrier-- as replacement for "means for protection" to more clearly reflect the purpose of this element. Reference is made to paragraph [0024] of the instant specification which describes in detail the various options to prevent foreign matter to reach the wheel set shaft, as air is drawn in from outside into the interior of the electric drive.

Claims 6 and 11 have been amended to set forth additional structure of the catch device as one implementation of the barrier. Applicant has introduced the terms "first section" and "second section" as parts of the catch device and arranged on the inlet side and the outlet side, respectively. Support therefore can be clearly found in the Figure (cf. reference numeral 35 on the left-hand side and on the right-hand side).

Claims 2, 5, 7-10, 12 have been amended to make them consistent with the changes to claim 4 and cancellation of claim 1.

Claim 16 has been added to set forth a particular feature of the catch device. Reference is made to reference numeral "45" shown in the figure and described in paragraph [0024] of the instant specification.

Independent claim 4 on file relates to a direct electrical drive which includes a fan to draw in air into a rotor for cooling purposes. To prevent ingress of foreign matter, a barrier is provided by which foreign matter drawn in through the air inlet is deflected away from the wheel set shaft.

Applicant respectfully submits that the combination of Hannes and Muramoto, as suggested by the Examiner, fails to raise a *prima facie* case of obviousness.

Hannes describes an electric machine having an inlet port 15 through which air is drawn by a pressure fan 320 in close proximity to the inlet port and a suction fan 14 in close proximity to an outlet port 36. The passage in column 5, lines 21-32 is illustrative and translated hereinafter for the benefit of the Examiner:

The additional fan designed as pressure fan 320 is mounted as internal fan on the shaft 322 and conjointly executes with the latter

the same rotational movements. As the function of the pressure fan 320 differs from the function of the suction fan 34, advantageous changes are realized in the shape of the blades which differences, however, are not shown. The pressure fan 320 draws in air via the air inlet 35 in accordance with the arrow 319 and forces air via the rotor openings 37 to the suction fan 34 which assists the pressure fan 320 and conducts the heated air via the air outlet 36 out of the machine:

In Hannes, reference numeral 320 relates to the pressure fan which is not shown in any greater detail and is provided to draw in air. In other words, Hannes fails to describe a barrier to prevent ingress of foreign matter. Nothing in the Hannes disclosure would indicate the presence of a barrier. The Examiner refers to the enclosure 311 as a means for protection to substantiate the rejection of original claim 4. The enclosure 311 to which the Examiner refers is a cooling jacket which has formed therein cooling channels 38 and is positioned on the stator. There is no protective function provided by the cooling jacket to prevent ingress of foreign matter via the inlet port 35.

In rejecting original claim 8, the Examiner appears to consider the element 320 as a barrier (here baffle wall) to deflect foreign matter. Applicant respectfully disagrees. As noted above, reference numeral 320 relates to the pressure fan which draws in air. Clearly, foreign matter can and will be drawn in as well. Thus, the Examiner's interpretation in this regard is ill-advised and divorced from the disclosure of Hannes.

Muramoto generally describes a driving device for rolling stock. Disclosed is the presence of a heat pipe in the hollow part of the axle, which part is filled with a coolant.

It is respectfully submitted that a combination of Hannes and Muramoto does not produce the invention set forth in claim 4 but would merely result in an electrical drive for a wheel set of vehicle having a fan to draw in air to cool the rotor. Neither Hannes nor Muramoto suggests the provision of a barrier to prevent ingress of foreign matter as air is drawn in.

For the reasons set forth above, it is applicant's contention that neither Hannes nor Muramoto, nor a combination thereof teaches or suggests the features of the present invention, as recited in claim 4.

As for the rejection of the retained dependent claims, these claims depend on claim 4, share its presumably allowable features, and therefore it is respectfully submitted that these claims should also be allowed.

Withdrawal of the rejection under 35 U.S.C. §103(a) is thus respectfully requested.

CITED REFERENCES

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the claims on file. It is thus felt that no specific discussion thereof is necessary.

CLARIFICATION AMENDMENT

Applicant has amended paragraph [0006] to correct an obvious typographic error.

CONCLUSION

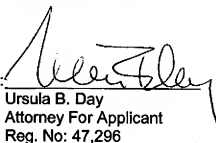
In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would

facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

By: 
Ursula B. Day
Attorney For Applicant
Reg. No: 47,296

Date: May 15, 2009
708 Third Avenue
Suite 1501
New York, N.Y. 10017
(212)244-5500
HMF:af